

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/786,319	02/25/2004	Daniel Zuzuly	2004P02541US (00355P0126U	2648	
75	90 06/24/2005		EXAM	INER	
Elsa Keller			VO, HIEN XUAN		
SIEMENS COR	RPORATION				
Intellectual Property Dept.			ART UNIT	PAPER NUMBER	
170 Wood Avenue South			2863		
Iselin, NJ 088	30		DATE MAILED: 06/24/200	DATE MAILED: 06/24/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)		
	10/786,319	ZUZULY ET AL.		
Office Action Summary	Examiner	Art Unit		
	Hien X. Vo	2863		
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet w	vith the correspondence address		
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a ly within the statutory minimum of thi will apply and will expire SIX (6) MO e, cause the application to become A	reply be timely filed rty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).		
Status				
 Responsive to communication(s) filed on <u>25 February 2004</u>. This action is FINAL. 2b)⊠ This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213. 				
Disposition of Claims				
 4) Claim(s) 1-27 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-27 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 				
Application Papers				
9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 02 July 2004 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat * See the attached detailed Office action for a list	ts have been received. ts have been received in a prity documents have bee au (PCT Rule 17.2(a)).	Application No n received in this National Stage		
Attachment(s)				
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 	Paper No	Summary (PTO-413) v(s)/Mail Date Informal Patent Application (PTO-152)		

DETAILED ACTION

Page 2

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-27 provisionally rejected under the judicially created doctrine of double patenting over claims 1-27 of copending Application No. 10/786,320. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

Application/Control Number: 10/786,319

Art Unit: 2863

Application Ser. No. 10/786,319

Copending Application Ser. No. 10/786,320

1. A method of providing electrical system monitoring and diagnosis, comprising:

providing a motor controller including solid state switches for controlling application of power to the motor, and a control circuit for controlling operation of the solid state switches and for measuring electrical power system characteristics relating to operation of the solid state switches;

providing an external monitoring and diagnostic device; establishing communications between the control circuit and the external monitoring and diagnostic device, and

periodically transferring parameters of the measured electrical power system characteristics from the control circuit to the external monitoring and diagnostic device to monitor electrical power system characteristics in real time.

- 2. The method of providing electrical system monitoring and diagnosis of claim 1 wherein providing a motor controller comprises providing a control circuit including a programmed processor for commanding operation of the solid state switches and a memory connected to the programmed processor for storing the parameters of the measured electrical power system characteristics.
- 3. The method of providing electrical system monitoring and diagnosis of claim 2 wherein transferring parameters of the measured electrical power system characteristics comprises reading the stored parameters of the measured electrical power system characteristics from the memory.
- 4. The method of providing electrical system monitoring and diagnosis device of claim 1 wherein providing an external monitoring and diagnostic device comprises providing a computer having a memory for storing the transferred parameters.
- 5. The method of providing electrical system monitoring and diagnosis of claim 1 wherein providing an external monitoring and diagnostic device comprises providing a personal digital assistant having a memory for storing the transferred parameters.
- 6. The method of providing electrical system monitoring and diagnosis of claim 1 further comprising printing a listing of the transferred parameters of the measured electrical power system characteristics.
- 7. The method of providing electrical system monitoring and diagnosis of claim 1 wherein periodically transferring parameters of the measured electrical power system characteristics comprises transferring the parameters at select time intervals.
- 8. The method of providing electrical system monitoring and diagnosis of claim 1 wherein the control circuit measures line voltage, motor voltage and motor current.
- 9. The method of providing electrical system monitoring and diagnosis of claim 1 wherein establishing communications

A method of configuring a motor controller with an external device, comprising:

providing the motor controller to include solid state switches for controlling application of power to the motor, and a control circuit for controlling operation of the solid state switches, the control circuit comprising a programmed processor for commanding operation of the solid state switches, and a memory connected to the programmed processor for storing parameters relating to operation of the solid state switches;

providing the external device to include a memory for storing parameters relating to operation of the solid state switches,

establishing communications between the programmed processor and the external device, and

transferring a configuration database file between the controller memory and the external device memory, the configuration database tile comprising a plurality of the stored parameters relating to operation of the solid state switches.

- 2. The method of configuring a motor controller with an external device of claim 1 further comprising entering parameters relating to operation of the solid state switches into the external device memory to define the configuration database file to be transferred to the controller memory.
- 3. The method of configuring a motor controller with an external device of claim 1 wherein transferring a configuration database file comprises downloading the configuration database file from the external device memory to the controller memory.
- 4. The method of configuring a motor controller with an external device of claim 1 wherein transferring a configuration database tile comprises uploading the configuration database file from the controller memory to the external device memory.
- 5. The method of configuring a motor controller with an external device of claim 4 further comprising subsequently downloading the uploaded configuration database file from the external device memory to the controller memory.
- The method of configuring a motor controller with an external device of claim 4 further comprising printing a listing of the uploaded configuration database file.
- 7. The method of configuring a motor controller with an external device of claim 1 further comprising storing a plurality of pre-configured database files in the external device memory.

Application/Control Number: 10/786,319

Art Unit: 2863

between the control circuit and the external monitoring and diagnostic device comprises providing an infrared communication path between the control circuit and the external monitoring and diagnostic device.

10. The method of providing electrical system monitoring and diagnosis of claim 1 wherein establishing communications between the control circuit and the external monitoring and diagnostic device comprises providing a wired communication path between the control circuit and the external monitoring and diagnostic device.

11. A motor controller system for monitoring and diagnosing electrical power system characteristics, comprising:

a motor controller including solid state switches for controlling application of power to a motor, and a control circuit for controlling operation of the solid state switches and for measuring electrical power system characteristics relating to operation of the solid state switches;

an external monitoring and diagnostic device including a memory for storing parameters of the measured electrical power system characteristics and an interface for communication with the motor controller; and

means operatively associated with the control circuit and the external monitoring and diagnostic device for transferring parameters of the measured electrical power system characteristics from the control circuit to the external monitoring and diagnostic device to monitor electrical power system characteristics in real time.

- 12. The motor controller system of claim 11 wherein the control circuit comprises a programmed processor for commanding operation of the solid state switches and a memory connected to the programmed processor for storing the parameters of the measured electrical power system characteristics.
- 13. The motor controller system of claim 12 wherein the transferring means comprises means for reading the stored parameters of the measured electrical power system characteristics from the memory.
- 14. The motor controller system of claim 11 wherein the external monitoring and diagnostic device comprises a computer having a memory for storing the transferred parameters.
- 15. The motor controller system of claim 11 wherein the external monitoring and diagnostic device comprises a personal digital assistant having a memory for storing the transferred parameters.
- 16. The motor controller system of claim 11 further comprising printer operatively associated with the external monitoring and diagnostic device for printing a listing of the transferred parameters of the measured electrical power system characteristics.
- I 7. The motor controller system of claim 11 wherein the transferring means transfers the parameters at select time intervals.

- 8. The method of configuring a motor controller with an external device of claim 7 wherein transferring a configuration database file comprises downloading a select one of the pre-configured database tiles from the external device memory to the controller memory.
- 9. The method of configuring a motor controller with an external device of claim 1 wherein establishing communications between the programmed processor and the external device comprises providing an infrared communication path between the programmed processor and the external device.
- 10. The method of configuring a motor controller with an external device of claim 1 wherein establishing communications between the programmed processor and the external device comprises providing a wired communication path between the programmed processor and the external device.
- 11. An externally configurable motor controller system, comprising:

a motor controller including solid state switches for controlling application of power to a motor, and a control circuit for controlling operation of the solid state switches, the control circuit comprising a programmed processor for commanding operation of the solid state switches, and a memory connected to the programmed processor storing parameters relating to operation of the solid state switches,' and an interface circuit operatively connected to the programmed processor,

an external configuration device including a memory for storing parameters relating to operation of the solid state switches and an interface for communication with the motor controller; and

means operatively associated with the programmed processor and the external configuration device for transferring a configuration database file between the controller memory and the external device memory, the configuration database file comprising a plurality of the stored parameters relating to operation of the solid state switches.

- 12. The externally configurable motor controller system of claim 11 wherein the parameters stored in the external device memory define the configuration database file to be transferred to the controller memory.
- 13. The externally configurable motor controller system of claim 11 wherein the transferring means comprises means for downloading the configuration database file from the external device memory to the controller memory.
- 14. The externally configurable motor controller system of claim 11 wherein the transferring means comprises means for uploading the configuration database tile from the controller memory to the external device memory
- 15. The externally configurable motor controller system of claim 14 wherein the transferring means further comprises means for subsequently downloading the uploaded configuration database file from the external device memory to the controller memory.
- 16. The externally configurable motor controller system of claim 14 further comprising a printer operatively associated

Art Unit: 2863

- 18. The motor controller system of claim 11 wherein the control circuit measures line voltage, motor voltage and motor current.
- 19. The motor controller system of claim 11 wherein the transferring means comprises an infrared communication path between the control circuit and the external monitoring and diagnostic device.
- 20. The motor controller system of claim 11 wherein the transferring means comprises a wired communication path between the control circuit and the external monitoring and diagnostic device.
- 21. A soft starter system for monitoring and diagnosing electrical power system characteristics, comprising:
- a motor controller including solid state switches for controlling application of power to a motor, and a control circuit for controlling operation of the solid state switches, the control circuit comprising a programmed processor for commanding operation of the solid state switches and for measuring electrical power system characteristics relating to operation of the solid state switches, and a memory connected to the programmed processor storing parameters of the measured electrical power system characteristics;

an external monitoring and diagnostic device including a memory for storing parameters of the measured electrical power system characteristics and an interface for communication with the motor controller, and

a monitoring and diagnostic program operatively implemented in the external monitoring and diagnostic device for transferring parameters of the measured electrical power system characteristics from the control circuit to the external monitoring and diagnostic device to monitor electrical power system characteristics in real time.

- 22. The soft starter system of claim 21 wherein the external monitoring and diagnostic device comprises a computer having a memory for storing the transferred parameters.
- 23. The soft starter system of claim 21 wherein the external monitoring and diagnostic device comprises a personal digital assistant having a memory for storing the transferred parameters.
- 24. The soft starter system of claim 21 wherein the monitoring and diagnostic program is operable to upload the parameters from the controller memory to the external monitoring and diagnostic device memory.
- 25. The soft starter system of claim 21 wherein the control circuit measures line voltage, motor voltage and motor current.

with the external device for printing a listing of the uploaded configuration database file.

- 17. The externally configurable motor controller system of claim 11 wherein the external device memory stores a plurality of pre-configured database files.
- 18. The externally configurable motor controller system of claim 17 wherein the transferring means comprises downloading a select one of the pre-configured database files from the external device memory to the controller memory.
- 19. The externally configurable motor controller system of claim 11 further comprising an infrared communication path between the programmed processor and the external device.
- 20. The externally configurable motor controller system of claim 11 further comprising a wired communication path between the programmed processor and the external device.
- 21. An externally configurable soft starter system, comprising:

a motor controller including solid state switches for controlling application of power to a motor, and a control circuit for controlling operation of the solid state switches, the control circuit comprising a programmed processor for commanding operation of the solid state switches, and a memory connected to the programmed processor storing parameters relating to operation of the solid state switches, and an interface circuit operatively connected to the programmed processor;

an external configuration device including a memory for storing parameters relating to operation of the solid state switches and an interface for communication with the motor controller, and

- a configuration program operatively implemented in the programmed processor and the external configuration device for transferring a configuration database file between the controller memory and the external device memory, the configuration database file comprising a plurality of the stored parameters relating to operation of the solid state switches.
- 22. The externally configurable soft starter system of claim 21 wherein the parameters stored in the external device memory define the configuration database file to be transferred to the controller memory.
- 23. The externally configurable soft starter system of claim 21 wherein the configuration program is operable to download the configuration database tile from the external device memory to the controller memory.
- 24. The externally configurable soft starter system of claim 21 wherein the configuration program is operable to upload the configuration database file from the controller memory to the external device memory.
- 25. The externally configurable soft starter system of claim 24 wherein the configuration program is operable to subsequently download the uploaded configuration database file from the external device memory to the controller memory.

Application/Control Number: 10/786,319 Page 6

Art Unit: 2863

26. The soft starter system of claim 21 wherein the interface comprises a wireless interface.	The externally configurable soft starter system of claim wherein the external device memory stores a plurality of pre-configured database files.
27. The soft starter system of claim 26 wherein the interface comprises a wired interface.	27. The externally configurable soft starter system of claim 26 wherein the configuration program is operable to download a select one of the pre-configured database files from the external device memory to the controller memory.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the independent claims of the present application differ from the patented claims in having the phrase: "an external monitoring and diagnostic device" and "database file" or the equivalent language. In order to monitor and diagnosis of the motor controller including solid state switches for controlling application of power to the motor, and a control circuit for controlling operation of the solid state switches and for measuring electrical power system characteristics relating to operation of the solid state switches with the external device that includes a programmed processor and memory to store the parameters relating to operation of the solid states switches and downloading or uploading to the motor controller by the communication path such as infrared, wired or wireless. Therefore, the subject claims are broader than the copending application claims. It would therefore have been obvious to modify the claims of copending application 10/786,320 to claim the more limited of the external monitoring and diagnosis device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien X. Vo whose telephone number is (571) 272-2282. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

Application/Control Number: 10/786,319 Page 7

Art Unit: 2863

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hien Vo 06/20/05

> John Barlew Servisory Patent Examiner Secondony Center 2800